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# the wise use of electricity

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## THE WISE USE OF ELECTRICITY

There is a growing awareness these days that we should all be alert to ways of avoiding waste and conserving our natural resources.

At Hydro we whole-heartedly endorse this trend and have produced this booklet to help you make the best possible use of energy throughout your home.

There is no special magic in the suggestions you're about to read. They're simply practical, common sense tips which will help eliminate wasted energy.

## HEATING THE HOME

These ideas will help you make better use of electricity in whatever kind of heating system you use. And at the same time they'll help your whole system work at peak efficiency.

**No. 1. Don't play around with the thermostat—**although we agree it's a temptation. Set it for the temperature you want, then leave it alone. For every degree temperature above the normal setting (usually 72°) your heating costs will rise by about three percent. And setting a thermostat way higher than normal won't make your home heat any faster. Furnaces and heaters have a habit of taking their time.

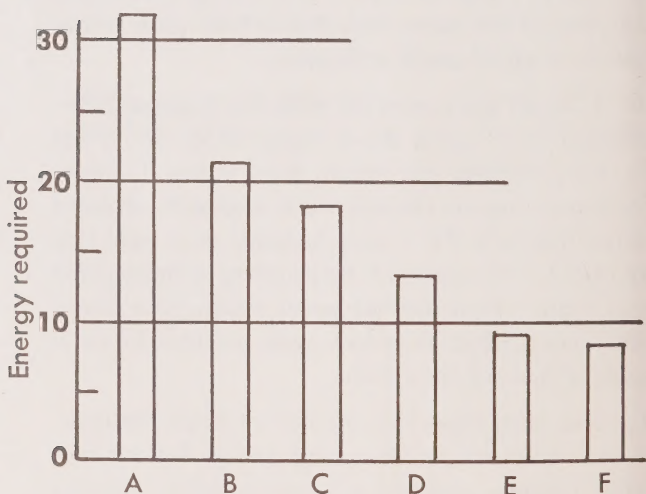
**2. The only time** you should set back the thermostat is when you're going away for an extended time—perhaps a week or more. Turning it back for an hour or two or even overnight just means extra, concentrated running time later on to bring floors, walls and furniture back to the right temperature.

**3. Have your entire** heating system checked before the heating season. A neglected heating system will soon become inefficient and may let you down when you need it most. Once a month, take a critical look at the furnace filter. A dust

clogged filter means your system has to work just that much harder. Keeping filters clean will keep the air inside your home cleaner and allow more heat to pass through the system. An ounce of prevention here is worth a pound of cure when the service man comes to call.

#### 4. Be sure your home has enough insulation.

It takes almost **twice as much fuel** to heat an uninsulated home. A new home probably has good insulation—in an older home the insulation may have settled or deteriorated to the point where it's not doing too much good. Regardless of what type of heating system you have, insulating your home can increase comfort and reduce heating cost. The following chart shows the effect of insulation in home heating:



**The Effect of Insulation on Heating Capacity Required in a 3-Bedroom Frame Residence having 8250 Cubic Feet of Heated Volume**

- A No insulation.
- B With 3 inches of mineral wool over ceilings only.
- C With 3 inches of mineral wool over ceilings and 2 inches of insulation in walls.



- D With 3 inches of insulation over ceilings and 2 inches of insulation in walls and under floors.
- E With 3 inches of insulation over ceilings, in walls and under floors, and with storm windows and doors.
- F With 6 inches of insulation over ceilings and 3 inches of insulation in walls and under floors, and with storm windows and doors.

**5. Along with the insulation** you should seal cracks around the doors and windows. An almost unnoticed gap of  $\frac{1}{4}$ " along the bottom of a normal three foot door is the same as having a 9 square inch hole right in the living room wall. Naturally you should also have well fitted storm doors, windows and some measure of weather-stripping about the house. Storm doors and windows will reduce heat loss up to 15%.

**6. Drawing the curtains is a form of insulation.** Windows are a prime source of heat loss—draperies form a barrier. However, on sunny days, by all means let the sunshine in . . . sunshine can help keep a room warm.

**7. Don't waste energy** heating any space you're not using. Close doors leading to unheated parts of the house. And if you have a spare guest room that's not being used, shut off the register and close the door behind you as you leave. It makes sense.

**8. Close the fireplace damper** tightly. Heat will vanish up the chimney.

**9. Keep heating registers** and cold air returns clean and clear. Putting a chair over a heating register interferes with natural circulation and the heated air may discolour light fabrics and synthetics.

## **SUMMER COOLING**

**1. Proper insulation** is just as important in keeping your home cool as it is in keeping it warm. Make sure your insulation is up-to-date by

following the ideas outlined under "Heating The Home". And make sure the air conditioning unit fits tightly when installed.

**2. Air conditioners have filters** that should be checked and cleaned regularly. Not only to conserve energy, but to keep the air in your home free from outside dust and pollens.

**3. Electric lights and other appliances** generate heat. Make sure they're turned off when not in use.

**4. Make sure the clothes dryer** in the laundry room is vented to the outdoors to prevent heat and moisture from being released inside the home.

**6. Always keep windows and outside door** completely closed while your cooling unit is operating.

**7. If you go away** on a trip or vacation, turn your air conditioner off before you go. Ask a neighbour to turn it on a few hours before you expect to return. This will conserve energy—and you'll still return to a cool home.

## **IN THE KITCHEN**

You probably use more electricity in your kitchen than in any other room in your house. There's a lot you can do to conserve energy here.

**1. When cooking vegetables** don't drown them—use very little water and cook only until tender. You'll save vitamins and the food will taste and look better. If you use too much water then you'll be using unnecessary energy in bringing the water to a boil.

**2. Use well fitted sauce pan lids** to keep the heat inside. Start to boil water on a "high" setting, then reduce to "low" or "simmer". The food won't cook any faster on "high", you'll just use more energy, generate more heat, steam up your kitchen and maybe end up with burnt cabbage for dinner.

**3. Pick a pan** that fits the element you'll be using. This will avoid waste heat escaping from around the edges. Pans should be flat bottomed and straight sided, so that all the heat goes right into the food you're cooking.

**4. Bright, shiny pans** are best. Not because they merely look better, but because they allow faster cooking. Aluminum pans will brown baked goods especially well, because aluminum is a good conductor and reflector of heat. If you're planning to use glass or ceramic pans, the oven temperature can be reduced by 25 degrees.

**5. Consider the oven** for whole meal cooking. Pick foods that cook in the same time at the same temperature. And don't open up the oven door for a quick peek unless you have to—heat escapes quicker than you think.

**6. Remove Meats** from the refrigerator at least one hour before putting them in the oven this will shorten the cooking time. Frozen foods should be thawed prior to cooking.

**7. Toast in the toaster—not the oven.** A toaster is efficient—the oven is wasteful for such a minor task. When boiling water for a single cup of tea or coffee don't fill up the kettle and boil more than you need.

**8. Never use the oven** to heat up a cool kitchen. A small space heater will do the job more efficiently, and use less electricity doing it.

**9. Always double check** to make sure all surface elements are turned off after use. When cooking you can often turn off the units up to five minutes ahead of time—and let the food continue to cook as the heat gradually diminishes.

**10. If your refrigerator needs defrosting,** do it before the ice deposit reaches  $\frac{1}{4}$ " thickness. Ice acts as unwanted insulation, reduces cooling power and will raise the temperature in the freezer section.



**11. Be sure your refrigerator** is air-tight. A good test—close the door on a piece of ordinary paper. If the paper is easy to pull out, then you're wasting cold air. Replace the gasket.

**12. Never open the refrigerator door** more often than necessary. Opening and closing the door over and over, or leaving it open is extremely wasteful.

**13. A refrigerator** should be installed away from direct warm spots such as heaters or sunshine flooding through a kitchen window in the late afternoon. When installing a refrigerator allow enough room along the sides and at the back for free air circulation. An enclosed or built-in refrigerator may lack proper air circulation—this places a strain on the cooling system since heat cannot be dissipated properly.

**14. Chill** very hot foods before refrigerating. Placing the hot pan in cold sink water is one easy way to reduce the temperature quickly.

**15. Overcrowding a refrigerator** interferes with the normal air circulation inside and will tend to overwork the compressor to maintain a cold temperature.

## **OTHER APPLIANCES**

Reading the manufacturers instructions is a basic way to prevent wasting energy and ensure top performance from any appliance. Learning all the features and what each will do will allow you to run the equipment properly.

**1. Run a dishwasher** only when there's a full load to be done. In the meantime, use it to store plates and cutlery until you're ready to wash the dirty dishes. This way you'll need fewer washes and save hot water.

**2. If your clothes washer** has a water level selector, choose the correct setting for the size of the load. Remember that only sufficient water is necessary for good results.



**3. Clean the lint filter on a clothes dryer** after each load—this will reduce drying time. Never overdry clothes . . . it makes them harsh and stiff, in addition to wasting energy. If your dryer is not fully automatic experiment with the controls to determine the right setting for just-dry clothes.

**4. An unwatched television set costs** more to run and may even hasten repair bills. It's a good idea to turn off the set after finishing with your favourite program.

**5. Replace or empty** the dust bag in your vacuum cleaner regularly. If too much dust collects, the motor will be placed under a strain and the vacuum simply won't work efficiently—or do its job properly.

## CONSERVING WATER

**A dripping hot tap or shower head** may seem a little thing, yet it can be a source of extreme waste and considerable annoyance. One drop a second can add up to about 200 gallons a month—down the drain. A simple tap washer conserves hot water. Going on vacation—turn off the electricity supply to your water heater.

## LIGHTING

Putting one lamp here and another over there isn't really the best way to light a room. Here are some ideas for using lighting to its best advantage.

**1. Keep bulbs and fixtures clean.** Almost unnoticed accumulations of dust will lower the lighting level.

**2. Avoid glare.** It can tire your eyes in a hurry. Be sure light bulbs are shaded, and lighting equipment properly placed so that it doesn't reflect on television screens, glossy magazines and other shiny surfaces.

**3. Contrast is another** eye strainer. Avoid it by using lamps and shades that send light upwards as well as downward, and are wide enough at the bottom to spread light over a fairly wide area. And don't confine light to one spot in the room.

**4. In addition** to providing light both upward and downward, your lamp shades should conceal light bulbs both when standing and when you're seated. Shades should have a white or near-white lining to reflect light, they should be dense enough to keep the bulb from glaring through, but not opaque.

**5. Turning off the lights** when they're not needed is something a lot of homeowners neglect to do. Never leave lights burning just for burning's sake.

**6. In inaccessible places**, such as high ceiling hallways, where lamp replacement proves difficult, consider a "long life" bulb.

**7. When re-decorating** consider light paint finishes on ceilings, walls where possible. Since light colours reflect more light it might mean that you'll need fewer lamps.

By using these tips we hope that you'll continue to use all our resources wisely. When electricity is working harder for you, at less cost, you'll be doing yourself a good turn and helping at the same time to conserve one of our natural resources.



hydro in ontario

